In the claims:

For the Examiner's convenience, all pending claims are presented below with changes shown. Please cancel claim 27 without prejudice.

1. (Previously Presented) A method comprising:

testing a duty cycle of a random bit source;

varying an output voltage of a voltage source if the duty cycle has not substantially reached a first threshold; and

iteratively altering the output voltage of the voltage source until the duty cycle has not substantially reached the first threshold.

2. (Original) The method of claim 1 further comprising:

periodically latching a high frequency signal in response to a low frequency signal; and

outputting one or more binary digits corresponding to a voltage level of the latching high frequency signal.

3. (Previously Presented) The method of claim 1 wherein varying the output voltage of the voltage circuit further comprises updating a threshold voltage of a flash memory cell in the voltage circuit.

4. (Original) The method of claim 1 wherein varying the output voltage of the voltage circuit further comprises:

varying an input current to a non-inverting input of a differential amplifier to produce a first input voltage; and

varying an input current to an inverting input of the differential amplifier to produce a second input voltage.

5. (Original) The method of claim 1 wherein varying the output voltage of the voltage circuit further comprises altering the number of transistors in the voltage circuit determining the output voltage.

6. (Original) The method of claim 1 wherein the method of producing a uniform duty cycle output from a random bit source is used in a random number generator operable to produce random binary numbers for use in a cryptographic system for secure communications between a plurality of computers in a network.

7-24. (Cancelled)

25. (Previously Presented) The method of claim 1 wherein the first threshold is fifty percent.

26. (Previously Presented) A random bit source comprising:

a latch to produce a uniform duty cycle output;

a component to test the duty cycle; and

a programmable voltage source to vary an output voltage if the duty cycle has not substantially reached a first threshold and iteratively alter the output voltage until the duty cycle has not substantially reached the first threshold.

27. (Cancelled)

28. (Previously Presented) The random bit source of claim 26 wherein the programmable voltage source comprises a flash memory cell, wherein varying the output voltage of the voltage circuit further comprises updating a threshold voltage of the flash memory cell.

29. (Previously Presented) The random bit source of claim 26 wherein the programmable voltage source further comprises differential amplifier, wherein varying the output voltage of the programmable voltage source further comprises varying an input current to a non-inverting input of the differential amplifier to produce a first input voltage and varying an input current to an inverting input of the differential amplifier to produce a second input voltage.

30. (Previously Presented) The random bit source of claim 26 wherein varying the output voltage of the programmable voltage source further comprises altering the number of transistors in the programmable voltage source determining the output voltage.

31. (Previously Presented) The random bit source of claim 26 wherein producing a uniform duty cycle output from the random bit source is used in a random number generator operable to produce random binary numbers for use in a cryptographic system for secure communications between a plurality of computers in a network.

32. (Previously Presented) The random bit source of claim 26 wherein the first threshold is fifty percent